

39. *RALLUS CÆRULESCENS* Gm.; Sharpe, Cat. B. Brit. Mus. xxiii. p. 25 (1894).

*a*, ♂ ad. N'gong, Masailand, Nov. 30, 1898.

40. *CREX CREX* (Linn.); Sharpe, Cat. B. Brit. Mus. xxiii. p. 82 (1894).

*a*, ♀ imm. Nairobi, Masailand, June 2, 1899.

I have seen occasional specimens of this species in November and April.

41. *TYMPANISTRIA TYMPANISTRIA* (Temm.); Salvad. Cat. B. Brit. Mus. xxi. p. 504 (1893).

No. 143, ♀. N'gong, Dec. 29, 1898.

[The presence of some rufous secondaries, mottled with black vermiculations, indicates that the specimen is immature, and the forehead and chest are grey, with ochreous margins to the feathers of the latter part.—R. B. S.]

42. *FRANCOLINUS HILDEBRANDTI* Cab.; Sharpe, Ibis, 1892, p. 552.

*a*, ♂ ad. N'gong, Masailand, Nov. 30, 1898.

This Francolin is of much wider distribution than *F. schuetti*, and, along with *Pternistes infuscatus*, may be found both on the bare plains and in dense forest.

43. *FRANCOLINUS SCHUETTI* Cab.; Ogilvie Grant, Cat. B. Brit. Mus. xxii. p. 170 (1893).

*a*, ♀ ad. N'gong, Masailand, Oct. 2, 1898.

Nesting. Bill and feet coral-red. Very common in jungle and in the farms adjacent to forest. I have never seen this species on the open bare plains.

XXIX.—*On the Ibises of the Genus Theristicus.*

By T. SALVADORI, F.M.Z.S.

[Plates IX. & X.]

WHEN Signor Festa and I were working together at the great Ecuadorian collection made by the former, we easily recognized that the specimens of the genus *Theristicus* collected by Festa at Vallevecioso, not far from the paramos

of Cotopaxi, belonged to the distinct species which had been described by Graf von Berlepsch and M. Stolzmann under the name of *T. branickii*\* from specimens collected at Junin, Maraynioc, and Pariayacu, on the highlands of Peru. On turning to the British Museum Catalogue I was much surprised to find that Dr. Sharpe † had failed to recognize *T. branickii* as a distinct species, under the impression that the differences of plumage relied on by the describers for the separation of *T. branickii* from *T. melanopis* were only those of age or season. Moreover, I soon found out that the synonymy and geographical ranges attributed by Dr. Sharpe to the two species *T. melanopis* and *T. caudatus* recognized by him, required revision.

In order to settle several questions concerning the species of the genus *Theristicus*, I addressed myself also to Dr. Finsch, requesting him to give me some information as regards the specimens in the Leyden Museum, which had been attributed by Dr. Schlegel ‡ to a single species, *T. melanopis*, while it appeared to me that they must clearly belong to two distinct species. Dr. Finsch took the opportunity of his researches to publish the result of his enquiries in a paper under the title "Ueber die Arten der Gattung *Theristicus* Wagl." §. Dr. Finsch also recognized in this paper that *T. branickii* was a species distinct from *T. melanopis*, and, besides that, described what he believed to be a new allied species under the name *T. columbianus*.

But it seems that both Dr. Sharpe and Dr. Finsch have ignored the very accurate notes by Graf von Berlepsch and M. Stolzmann on the synonymy and geographical distribution of *T. melanopis* and *T. caudatus*, published in their paper "Résultats des Recherches ornithologiques faites au Pérou par Jean Kalinowski" ||.

This is the present state of things as regards the species

\* Ibis, 1894, p. 404.

† Cat. B. Brit. Mus. xxvi, p. 23.

‡ Mus. des Pays-Bas, *Ibis*, p. 7.

§ Notes from the Leyden Museum, vol. xxi. pp. 23-26 (1899).

|| P. Z. S. 1892, pp. 322-388.

of the genus *Theristicus*, the subject of which I propose to treat in this paper.

As already stated, Graf von Berlepsch and M. Stolzmann, in their paper mentioned above, have treated of the differences between *T. melanopis* and *T. caudatus*, and of their geographical distribution. They have shown that the first species inhabits the southern and western parts of South America, from Magellania and Patagonia to the western side of the Andes in Chile and Peru as far north as Ica and Chorillos, while the other species inhabits the northern and eastern parts of South America from Cayenne and British Guiana westward to Venezuela and Colombia, and southward to Brazil, Paraguay, Uruguay, and the northern part of the Argentine Republic.

To the two species already mentioned must be added a third, *Theristicus branickii* Berl. et Stolzmann., peculiar to the highlands of Peru and Ecuador, which, so far as we know at present, extends from Pitumarca, near Tinta, in Peru, to Vallevicioso in Ecuador.

Besides these, as already mentioned, Dr. Finsch has described quite recently a *Theristicus columbianus*, from a specimen contained in the Leyden Museum, received from the Parisian dealer Deyrolle, as coming from Colombia, but without any collector's name. Dr. Finsch observed that no species of the genus *Theristicus* was known from Colombia, previously to his publication; a statement not correct, as Berlepsch and Stolzmann in 1892 had already mentioned specimens of the genus *Theristicus* from Colombia as contained in the Berlepsch Museum, which had been identified with *T. caudatus*. Graf von Berlepsch has very kindly sent me for inspection these specimens, one of which is from Antioquia, and also two from Venezuela, collected by Mr. G. K. Cherrie at a place named Altagracia. These specimens from Colombia and from Venezuela do not at all show the characters attributed by Dr. Finsch to his *T. columbianus*, viz., the wing-coverts and the hidden base of the secondaries grey, instead of white, as in *T. caudatus*, to which species they certainly belong. Dr. Finsch,

at my request, has very kindly sent me for inspection the type of his *T. columbianus*, which, as I had expected, turns out to be an immature specimen of *T. caudatus*, with the light band on the wings and the base of the secondaries not grey (as stated by Dr. Finsch), but dull whitish grey.

The specimens of the genus *Theristicus* which I have been able to examine, and which have led me to these conclusions, are the following :—

(1) *THERISTICUS CAUDATUS*.

1. Adult specimen from Cayenne received from the Paris Museum (*Mus. Taurin.*, Cat. no. 2888).

2. Female adult from Cara-huassi, Salta, September 1896 (*Dr. Borelli, Mus. Taurin.*, Cat. no. 11633).

3. Adult specimen received in exchange from the Turati Museum, as collected in Brazil (*Mus. Taurin.*, Cat. no. 9365).

4. Adult specimen, from Bogotá, Colombia (*Mus. Berlepsch*).

5. Immature specimen, apparently from Bogotá (*Leyden Museum* : TYPE of *Theristicus columbianus* Finsch).

6. Adult specimen from Antioquia in Colombia (*Mus. Berlepsch*).

7 & 8. Two adult specimens, one marked female, from Altagracia in Venezuela, obtained by Mr. George K. Cherrie, November 1897 (*Mus. Berlepsch*).

9. Adult male from Valle Grande in Bolivia, obtained by G. Garlepp (*Mus. Berlepsch*).

(2) *THERISTICUS MELANOPIS*.

1. Adult specimen from Chile (*Cav. Picollet, Mus. Taurin.*, Cat. no. 2885).

2. Adult specimen, no exact locality (*Mus. Taurin.*, Cat. no. 2895).

3. Adult male, Santiago, Chile, March 1867, from the Museum of Santiago, Voyage of the 'Magenta' (*Mus. Taurin.*, Cat. no. 8353).

(3) *THERISTICUS BRANICKII*.

1. Adult male, Pariyacu, Peru, 18 October, 1892 (*J. Kalinowski, Mus. Berlepsch, SPECIM. TYPICUM*).

2. Adult male, Vallevecioso, Paramo del Cotopaxi, July (*Dr. E. Festa*).

3. Adult male, Vallevecioso, July (*Dr. Festa*).

4. Adult male, Vallevecioso, July (*Dr. Festa*).

5. Immature male, Vallevecioso, July (*Dr. Festa*).

6. Adult female, Vallevecioso, July (*Dr. Festa*).

7 & 8. Young specimens, Vallevecioso, July (*Dr. Festa*).

GENUS *THERISTICUS* Wagl.

Type.

*Theristicus* Wagl. Isis, 1832, p. 1231. *Ibis melanopsis* Lath.

Wagler gives the following characters of the genus *Theristicus* :—

“*Rostrum* gracilius (quam in genere *Ibidis*) ; *pedes* breves, robusti ; *tarsus* validus, *digiti* intermedii longitudine incluso hujus ungue, antice scutellis hexagonis tectus, postice reticulatus ; *digiti* validi, breviusculi, teretiusculi ; *ungues* mediocres, validi, arcuati, illi *digiti* anterioris intermedii acie interna subinflata (integra) ; *acrodactyla* elevato-scutellata. *Ptilosis* : lora ac stria utrinque ad latus menti nuda ; *alæ* et *cauda* prælongæ, hæc cuneata, alas transcendens ; *pili* ac *colli* plumæ longæ, lacere. *Color* prædominans obscurus et dilutus, remiges et cauda metallici.”

Dr. Sharpe has recently given the characters of the different genera belonging to the family *Ibididæ* ; those of the genus *Theristicus* may be summarized as follows :—

“ Anterior aspect of *tarsus* reticulated, with numerous hexagonal scales ; inner secondaries ordinary, not ornamented ; head feathered ; lores bare, no fleshy wattle on centre of throat ; forehead feathered ; lores with some warty papillæ, region of eye bare ; sides of chin and upper throat bare ; no crest of dependent feathers on nape.”

To these characters those of the colouring may be added, being very similar in all the species. General colour slaty grey, head and neck whitish buff ; upper part of the head

rufous-chestnut; greater upper wing-coverts grey or white; bill black; feet red.

*Hab.* South America.

*Key to the Species of the Genus Theristicus.*

- a.* Gastræo toto nigro-schistaceo; pileo et macula lata in parte antica colli imi rufo-castaneis; tectricibus alarum majoribus albis; basi obtecta remigum secundariorum alba . . . . . 1. *T. caudatus.*
- b.* Gastræo partim albicante; pileo tantum rufo-castaneo; collo toto albo, plus minusve fulvo tincto; pectore fascia transversa grisea ornato; tectricibus alarum majoribus griseis; remigibus secundariis omnino nigris.
- a'.* Major, rostro longiore; tectricibus alarum griseis pallidioribus; pectore summo tantum albo-fulvescente, fascia grisea transversa ornato . . . . . 2. *T. melanopsis.*
- b'.* Minor, rostro brevior et gracilior; tectricibus alarum griseis saturatoribus; pectore fascia grisea transversa ornato, et abdomine medio albis . . . . . 3. *T. branickii.*

1. THERISTICUS CAUDATUS.

*Curuçaca* Maregr. Hist. Nat. Bras. p. 191 (Pernambuco) (1648); Licht. Abhandl. Berl. Akad. 1816-17, p. 158 (= *Ibis albicollis*) (1819).

*Courly à col blanc de Cayenne* Daubent. Pl. Enl. viii. pl. 976 (1770).

*Le Grand Courlis de Cayenne* Buff. Hist. Nat. Ois. viii. p. 47 (1781).

*Scolopax caudatus* Bodd. Tabl. Pl. Enl. p. 57, n. 976 (1783).

*White-necked Ibis* Lath. Gen. Syn. iii. 1, p. 109, n. 6 (1785).

*Tantalus albicollis* Gm. S. N. i. 2, p. 653, n. 20 (1788); Lath. Ind. Orn. ii. p. 104, n. 6 (1790); Drapiez, Dict. Class. H. N. viii. p. 489 (1825).

*Mandurria ó Curucáu* Azara, Apunt. iii. p. 189, no. 362 (Paraguay) (1803).

*La Mandurria ou Curacau proprement dit* Sonnini, trad. d'Azara, Voy. iii. p. 217 (1809).

*Ibis albicollis* Vieill. N. D. xvi. p. 17 (1817); Dumont, Dict. Sc. Nat. xxii. p. 425 (1821); Wied, Reise nach Bras. ii. p. 169 (1821); Vieill. Enc. Méth. iii. p. 1146 (1823); Steph. in Shaw, Gen. Zool. xii. 1, p. 18 (1824); Less. Man. ii. p. 255 (1828); Wied, Beitr. Naturg. Bras., Vög. iv. p. 693 (Bahia, Rio Grande do Sul) (1831); Temm. Pl. Col. Tabl. Méth. p. 95 (1839); Cab. in Schomb. Reise Brit. Guiana, iii. p. 757 (Br. Guiana) (1848); Burm. La Plata-Reise, ii. p. 510 (Paraná, Mendoza, Tucuman) (1861).

*Tantalus mandurria* Lath. apud Drapiez, Dict. Class. H. N. viii. p. 490 (1825).

*Ibis melanopis* Wagl. (nec Gm.), Syst. Av. Gen. *Ibis*, sp. 17 (descr. huj. spec., sed excl. syn. nonnull.) (1827); Hartl. Syst. Verz. Ges. Mus., Vög. p. 111, no. 4 (Brasilien) (1844); Gerbe, Dict. Univ. H. N. vii. p. 7 (part., habitat, nec descr.) (1846); Burm. (nec Gm.), Syst. Uebers. Th. Bras. iii. p. 421 (syn. emend.) (1856); Schleg. Mus. P.-B., *Ibis*, p. 7 (part. nos. 3, 4, Brésil, Cayenne) (1863); Burm. J. f. O. 1860, p. 265, n. 233 (Mendoza, Paraná, Tucuman); Reinh. (nec Gm.), Vid. Meddel. Nat. For. 1870, p. 22 (Paracatú, Rio S. Francisco, Minas Geraes); Gieb. Thes. Orn. ii. p. 386 (part.) (1875); Ernst, Cat. Aves Mus. Caracas, p. 42 (Zulia et Orinoco) (1887).

*Ibis alba* (errore) Less. Tr. d'Orn. p. 567, n. 7 (nec n. 5, et syn. emend.) (1831).

*Theristicus melanopis* (part.) Wagl. Isis, 1832, p. 1232; Bp. Consp. Av. ii. p. 155, n. 1 (part., Paraguay) (1855); ScL. et Salv. Nom. Av. Neotrop. p. 127 (part.) (1873); Allen, Bull. Essex Inst. viii. p. 82 (Santarem) (1876); Berl. J. f. O. 1877, p. 124, n. 276 (Paraguay); Durnf. Ibis, 1880, p. 424 (Rio Pasaje, Salta, June); Barrows, Auk, 1884, p. 272 (Lower Uruguay, April); Sharpe, Cat. B. xxvi. p. 21 (part., Brazil), p. 265 (Rio Pilcomayo) (1898).

*Geronticus melanopis* Hartl. (nec Gm.) Index Azar. Apunt. p. 23, n. 362 (syn. emend.) (1847).

*Geronticus caudatus* G. R. Gr. Gen. B. iii. p. 566, n. 14 (1847).

*Theristicus albicollis* Licht. Nomencl. Av. p. 91 (Brasilien)

(1854); Bp. Compt. Rend. xl. p. 725, n. 173 (1855); id. Consp. Gen. Av. ii. p. 155, n. 2 (Brasil, Cayenne) (1855).

*Geronticus albicollis* Sel. P. Z. S. 1864, p. 728 (Zool. Gardens); Pelz. Orn. Bras. p. 307 (Itararé, Jaguaraiiba, Tayacocca, Murungaba, Araguay, Zamambaya, Caicara, Matto Grosso) et p. 457 (1868-71).

*Geronticus (Theristicus) caudatus* G. R. Gr. Hand-list, iii. p. 40, no. 10234 (S. America) (1871).

*Theristicus caudatus* Elliot, P. Z. S. 1877, p. 498 (partim); Sel. P. Z. S. 1879, p. 827 (Zool. Gard.), 1882, p. 794 (Zool. Gard.); id. List Vert. An. (8) p. 411 (1883); Salv. Ibis, 1886, p. 171 (ex Schomb.); Sel. et Huds. Arg. Orn. ii. p. 110 (part.) (1889); Graham Kerr, Ibis, 1891, p. 270 (R. Pilcomayo), 1892, p. 145 (December, resident on the Lower Pilcomayo); Berl. et Stolzm. P. Z. S. 1892, p. 392; Allen, Bull. Am. Mus. N. H. v. p. 150 (Matto Grosso) (1893); Berl. et Stolzm. Ibis, 1894, p. 405 (critical); Koenigsw. Orn. Paulista, J. f. O. 1896, p. 389 (S. Paulo); Sel. List Vert. An. p. 427 (1896); Salvad. Boll. Mus. Tor. no. 292, p. 31 (Salta) (1892); Sharpe, Cat. B. xxvi. pp. 23, 265 (British Guiana) (1898); Ihering, Av. Est. S. Paulo, p. 385 (1899); Finsch, Not. Leyd. Mus. xxi. pp. 24, 26 (Cayenne, Caicara) (1899); Sharpe, Hand-list Gen. & Sp. B. i. p. 186, n. 2 (British Guiana) (1899).

*Ibis caudata* Rehnw. J. f. O. 1877, p. 154 (deser. opt.) et p. 275.

*Ibis caudatus* Frenzel, J. f. O. 1891, p. 124 (Cordova).

*Theristicus melanopsis* Sharpe, Hand-list Gen. & Sp. B. i. p. 186, n. 1 (part., Central Brazil) (1899).

Pileo toto, cervicis parte infima, colloque antio infimo saturate fulvis; genis, vitta plumosa longitudinali gulæ intermedia ac collo albis, interdum plus minusve fulvescentibus; gulæ lateribus, loris, frontis lateribus verrucosis, ac tota regione periophthalmica nudis nigris; pectore, ventre, abdomine et crisso nigricantibus, vix nitore virescente indutis; dorsi plumis et scapularibus fuscis, vix nitore virescente indutis, apice pallide limbatis; tergo, uropygio, supracaudalibus, tibiarum plumis et alarum tectricibus inferioribus nigris, virescenti-niten-



tibus; alarum tectricibus minoribus et mediis cinereis albido limbatis; alarum tectricibus majoribus albis vittam longitudinalem maximam formantibus; remigibus ac cauda conica elongata nigris, metallice e viridi resplendentibus; remigum secundariorum basi obteeta alba: rostro nigro; iride rubra; pedibus colore roseo geranii. Long. tot. circa 750 mm.; al. 440; caud. 230; rostri culm. 170; tarsi 86.

*Junior.* Pelle nuda frontis et capitis laterum lævi, haud verrucosa; plaga pallida alæ sordide alba.

*Hab.* Cayenne (*Buffon*), Guiana Britannica (*Schomburgk*, *Whitely*); Venezuela, Orinoco et Zulia (fide *Ernst*), Altigracia (*Cherrie*); Colombia, Bogotá et Antioquia (*Mus. Berl.*); Brasilia, Santarem (*Allen*), Pernambuco (*Marcgrave*), Bahia (*Wied*), Paracatú, Rio S. Francisco (*Lund*), Matto Grosso (*Natterer*, *Smith*), S. Paulo et Paraná (*Natterer*), Rio Grande do Sul (*Wied*); Bolivia, Valle Grande (*Garlepp*, in *Mus. Berlepsch*); Paraguay (*Azara*), Rio Pilcomayo (*Kerr*); Uruguay (*Barrows*); Northern Argentina, Salta (*Durnford*, *Borelli*), Tucuman, Paraná, Mendoza (*Burmeister*), Cordova (*Frenzel*).

This species is easily distinguishable, having the breast black like the rest of the underparts, a broad white band on the wings, formed by the greater wing-coverts, and the hidden base of the secondaries white, also by the rusty-fulvous colour of the cap and of the two spots at the base of the neck, one anterior and the other posterior.

As stated above, I have examined nine specimens of this species. The first is from Cayenne, the very locality inhabited by the type-specimen, figured by Daubenton, on which were based both *Scolopax caudatus* Bodd. and *Tantalus albicollis* Gm. This specimen is strikingly similar to the figure, and remarkable for its great size, and the numerous warts on the naked skin of the forehead and sides of the head.

Scarcely different from it are the two specimens from Venezuela, and two others from Colombia (Bogotá and Antioquia), sent to me by Graf von Berlepsch; the only difference of any importance is in the colour of the lower

parts (breast, abdomen, and under tail-coverts) being of a deeper black. Moreover, the rusty-fulvous colour of the pileum and of the two spots at the base of the neck, in front and behind, are of a deeper hue in the Bogotá specimens than in the two from Venezuela.

The type-specimen of *Theristicus columbianus*, sent me by Dr. Finsch, certainly belongs to the present species; it is somewhat immature (as shown by the absence of warts on the forehead and sides of the head, the skin being quite smooth) and therefore has the light band on the wings greyish white, and the hidden base of the secondaries dull whitish.

A specimen in the Turin Museum, received "from Brazil" (no. 3), and another from Bolivia collected by Garlepp (*Mus. Berlepsch*) (no. 9) have the lower parts lighter, somewhat more greyish than those mentioned above; both have the forehead more extensively feathered, and the dimensions somewhat smaller, but the differences seem to be well within the limits of individual variation.

The specimen from Salta (no. 2), which, being a female, is somewhat smaller than the Cayenne bird, is quite similar to this, and differs only in the forehead being less naked, and the whitish colour of the neck more distinctly tinged with fulvous.

The geographical range of this species has been very well indicated by Berlepsch and Stolzmann. It is confined to the eastern part of Southern America, and from Cayenne extends westward to British Guiana, Venezuela, and Colombia, and southward through Brazil, to Bolivia, Paraguay, Uruguay, and Northern Argentina, which probably is the southern limit of the species, as the specimens in the neighbourhood of Buenos Ayres, which are found there during the winter, possibly belong to *T. melanopis*. This, however, can be ascertained only by examination of specimens collected in that country\*.

\* Mr. Hudson (P. Z. S. 1871, p. 261) describes the *Vanduria de Invierno*, which is found during the winter south of Buenos Ayres, as having the wings and back ash-blue, a character of *T. melanopis*, and the under surface and belly black, which is a feature of *T. caudatus*! Still I am inclined to believe that the bird mentioned is *T. melanopis*.

*Theristicus caudatus* has been confused with *T. melanopsis* by Wagler, Schlegel, Elliot, and also by Sclater and Salviu; but it has been duly recognized as distinct by Berlepsch and Stolzmann, who have succeeded in establishing its specific characters and geographical distribution very clearly. Dr. Sharpe also has recognized *T. caudatus* as a distinct species, but, having missed Berlepsch and Stolzmann's excellent notes, he has failed in tracing the geographical distribution, and consequently the synonymy given by him is not exact.

I should say that the specimen from Rio Pilcomayo (Cat. B. xxvi. p. 265), where, according to Mr. Graham Kerr, the bird is resident, must belong to *T. caudatus* and not to *T. melanopsis*\*.

## 2. THERISTICUS MELANOPIS.

*Black-faced Ibis* Lath. Gen. Syn. iii. pt. 1, p. 108, pl. lxxix. (New Year's Island, near Staten Island) (1785) (*cf.* Forster, Voy. ii. p. 521); *id.* Gen. Hist. ix. pl. 150.

*Tantalus melanopsis* Gm. S. N. i. 2, p. 653, n. 19 (Insula Novi Anni) (1788); Lath. Ind. Orn. ii. p. 704, no. 5 (1790).

*Ibis melanopsis* Vieill. N. D. xvi. p. 20 (1817) (ex Latham); Dumont, Dict. Sc. Nat. xxii. p. 427 (1821); Vieill. Enc. Méth. iii. p. 1148, pl. 65. f. 2 (1823); Steph. in Shaw, Gen. Zool. xii. 1, p. 12 (1824); Drapiez, Dict. Class. H. N. viii. p. 490 (1825); Wagl. Syst. Av., gen. *Ibis*, sp. 17 (part.) (1827); Gerbe, Dict. Univ. H. N. vii. p. 7 (part., descr. nec habitat) (1843); Des Murs in Gay, Hist. de Chile, i. p. 417 (1848); Hartl. Naumannia, 1853, pp. 216, 222 (Valdivia); Cass. in U. S. Astron. Exped. ii. p. 197 (Chile) (1856); Burm. La Plata-Reise, ii. p. 511 (sub *I. albicollis*) (1861); Schleg. Mus. P.-B., *Ibis*, p. 7 (part. nos. 1 and 2, Chile) (1863); Scl. P. Z. S. 1867, p. 339 (Chile); Scl. P. Z. S. 1870, p. 665 (Santiago, Zool. Gard.); Philippi & Sandb. Cat. Av. Chil. p. 34 (1868); Huds. & Scl. P. Z. S. 1872, p. 549 (Patagonia); Brehm, J. f. O. 1874, p. 95 (in confinement); Gieb. Thes. Orn. ii. p. 386 (part.) (1875); Rehnw. J. f. O.

\* P.S.—Dr. Sharpe now informs me that, as I surmised, the Pilcomayo specimen is *T. caudatus*.

1877, pp. 154, 275 (Chilean Subregion); Lataste, Proc.-verb. Soc. Sc. Chile, 1893, p. cxxii (Magellan Str.).

*Ibis albicollis* Less. (nec Gm.), Voy. Coq., Zool. i. p. 242 (Rives du Port Saint-Vincent).

*Theristicus melanopsis* part., Wagl. Isis, 1832, p. 1232; G. R. Gr. List Grall. Brit. Mus. p. 98 (Straits of Magellan, Chile) (1814); Licht. Nom. Av. p. 91 (Chile) (1854); Bp. Consp. Gen. Av. ii. p. 155, n. 1 (part., Chile, Ins. Nov. Anni) (1855); id. Compt. Rend. xl. p. 725, n. 172 (1855); Pelz. Reise Novara, Vög. p. 127 (Chile) (1865); ScL. et Salv. Ibis, 1868, p. 189 (Elizabeth I.); Cunningh. Ibis, 1869, p. 233 (W. Patagonia); ScL. et Salv. Ibis, 1870, p. 499 (Sandy Point); Newton, Ibis, 1870, p. 502 (egg, Elizabeth I.); id. P. Z. S. 1871, p. 56, pl. iv. f. 8 (egg); G. R. Gr. Hand-list, iii. p. 40, no. 10233 (Str. of Magellan, Chile) (1871); ScL. et Salv. Nom. Av. Neotrop. p. 127 (part.) (1873); Gigl. Viagg. 'Magenta,' pp. 956, 957, 963 (Patagonia) (1875); Durnf. Ibis, 1877, p. 190 (Buenos Ayres in winter), 1878, p. 400 (Patagonia); ScL. et Salv. P. Z. S. 1878, p. 436 (Sandy Point); id. Voy. Chall., Birds, ii. p. 206 (1880); Berl. et Stolzm. P. Z. S. 1892, pp. 372, 391; Berl. et Stolzm. Ibis, 1894, p. 405 (critical); Sharpe, Cat. B. xxvi. pp. 23 (part., Chile, Str. of Magellan) (1898); Finsch, Not. Leyd. Mus. xxi. pp. 25, 26 (Chile) (1899).

*Theristicus melanops* Darw. Voy. 'Beagle,' iii. Birds, p. 128 (Patagonia) (1841); Fraser, P. Z. S. 1843, p. 117 (Interior of Chile); Cunningh. Ibis, 1868, pp. 126, 488 (Straits of Magellan); Berl. et Stolzm. P. Z. S. 1892, p. 389 (Ica).

*Tantalus melanops* Forst. Icon. ined. in Brit. Mus. t. 117; id. (ed. Licht.) Deser. Anim. p. 332 (Insula Novi Anni, Terræ Statuum vicina) (1844).

*Geronticus melanopsis* G. R. Gr. Gen. B. iii. p. 566, n. 15 (1847); ? ScL. P. Z. S. 1876, p. 836 (Zool. Gard.).

*Theristicus albicollis* Rehm. (nec Gm.) Syn. Av. t. 140, ff. 531, 532 (?) (1848); id. Av. Syst. Nat. p. 14 (1850).

*Ibis melanopsis* Bibra, Denkschr. k. Ak. Wiss. v. p. 131 (N. Chile) (1853); id. J. f. O. 1855, p. 56 (N. Chile).

*Geronticus (Theristicus) melanopsis* G. R. Gr. Hand-list, iii. p. 40, no. 10233 (Str. of Magellan, Chile) (1871).

*Geronticus melanotis* (errore), *Scl. P. Z. S.* 1876, p. 828 (Zool. Gard.).

*Theristicus caudatus* Elliot, *P. Z. S.* 1877, p. 498 (part.); *Salv. (nec Bodd.) Cat. B. Strickl. Coll.* p. 525, no. 2558 (specim. *a*, Chile) (1882); *Scl. List Vert. An.* (8) p. 411 (part.) (1883); *Scl. et Huds. Arg. Orn.* ii. p. 110 (part., Antarctic S. Amer.) (1889); *Holland, Ibis*, 1892, p. 205 (Estancia Esjartilla, between Ranchas and Chascomus, from May to August); *James, New List Chil. B.* p. 9 (Chile) (1892); *Scl. List Vert. An.* (9) p. 427 (part.) (1896).

? *Vanduria* (or *Banduria*?) *de Invierno* Hudson, *P. Z. S.* 1871, p. 261 (Pampas about lat. 38° S.).

? *Geronticus melanopsis* Huds. & *Scl. P. Z. S.* 1871, p. 261 (south of Buenos Ayres).

*Theristicus melanopsis* Heine & Rehnw. *Nom. Mus. Hein.* p. 313 (1890).

*Ibis caudata* Hartert (nec Bodd.), *Kat. Vogelsamml. Mus. Senckenb.* p. 205, no. 3078 (Chile) (1891).

*Ibis (Theristicus) caudatus* Oust. *Miss. Sc. Cap Horn, Ois.* pp. 140, 330 (part.) (1891).

*Theristicus melanopsis* Sharpe, *Hand-list Gen. & Sp. B. i.* p. 186, n. 1 (part., Chile and the Str. of Magellan) (1889).

Pileo toto fulvo-ærginoso, lateribus capitis, vitta plumosa longitudinali gulæ intermedia, collo ac pectore albo-fulvescentibus, loris verrucosis, regione periorbitali ac gulæ lateribus, interdum etiam parte media infima gulæ, nudis, nigris; fascia præpectoralis transversa, plus minusve lata, cinerea; abdomine tibiarumque plumis nigricantibus; crisso nigerrimo, nitore virescente; dorso, scapularibus, alarumque tectricibus griseis fere sericeis, tectricibus majoribus et mediis paullo pallidioribus; remigibus, subalaribus, cauda et supracaudalibus nigris, viridi-nitentibus: rostro nigro; iride rubro-sanguinea; pedibus rubris. Long. tot. circa 700 mm.; al. 400; caud. 200; rostri culm. 140; tarsi 80.

*Hab.* Magellania (*Forster, Cunningham*); Patagonia (*Hudson*); Southern Argentina (*Hudson*); Chile (*Mus. P.-B., Varsovia, &c.*), Valdivia (*Philippi*); Peru occ., Ica (*Kalinowski*), Chorillos (*Jelski*).

This species is easily known from the preceding by the

following characters:—the wings are grey, wanting the broad white band so conspicuous in *T. caudatus*; besides, the large rusty-fulvous patch in the middle of the lower part of the fore neck is wanting; the breast is not slaty black as in *T. caudatus*, but fulvous white like the neck, and between this and the breast there is a grey transverse band, more or less broad; finally the hidden bases of the secondaries are not white.

I have examined only three specimens of this species, all in the Turin Museum. One, from an unknown locality, and apparently the oldest of the three, has the upper parts grey, almost uniform, and the grey pectoral band not very distinct, being formed by grey feathers, tipped with fulvous-white, so that the band seems almost obsolete. Reichenbach has figured a similar bird, apparently with no pectoral band at all (*op. cit.* fig. 532). Besides, the above-mentioned bird is remarkable for having the feathered line along the middle of the throat confined to the upper part, while lower down the throat is entirely naked, even in the middle.

The other two specimens examined by me are both from Chile, one sent by the Piedmontese consul Cav. Picollet, and the other (a male) obtained from the Museum of Santiago during the voyage of the 'Magenta.' They are nearly similar, and differ from the preceding one in having the band along the middle of the throat entirely feathered, the feathers of the upper parts with a dark subapical spot quite distinct, the grey pectoral band broader, and the greater wing-coverts somewhat whitish. I think that both these birds are immature.

The area of this species has been clearly described by Berlepsch and Stolzmann. It extends from Magellania to Chile and the western part of Peru as far north as Ica and Chorillos. On the east it inhabits Patagonia, whence during winter it migrates into the southern part of Argentina, apparently as far north as the Province of Buenos Ayres (*Hudson*).

Dr. Sharpe (*Cat. B. l. c.*) has erroneously extended the



area of this species as far north as Matto Grosso, where *T. caudatus* only is found.

3. *THERISTICUS BRANICKII*. (Plates IX. & X.)

*Ibis melanopsis* Tsch. (nec Gm.), Arch. f. Naturg. 1844, 1, p. 312, n. 313 (Peru); Tsch. et Cab. Faun. Per. pp. 51, 298 (La Puna) (1845-46); Sc. et Salv. P. Z. S. 1869, p. 600 (Pitumarca).

*Theristicus melanopsis* Tacz. (nec Gm.), P. Z. S. 1874, p. 562 (Junin); Sharpe, Cat. B. xxvi. p. 21 (part., specim. g. Pitumarca) (1898).

*Theristicus caudatus* part. Elliot, P. Z. S. 1877, p. 498 (Peru); Tacz. (nec Bodd.), Orn. Per. iii. p. 417 (Peru, Région de la Puna, Junin, Lima, Huanta, Maraynioc) (1886).

*Theristicus branickii* Berl. et Stolzm. Ibis, 1894, p. 404 (Peruvia alta, Junin, Maraynioc, Pariayacu); Finsch, Not. Leyd. Mus. xxi. pp. 25, 26 (1899); Salvad. et Festa, Boll. Mus. Zool. Tor. no. 368, p. 45 (Vallevicioso, Ecuador) (1900).

*Theristicus melanopsis* Sharpe, Hand-list Gen. & Sp. B. i. p. 186, no. 1 (part., Peru) (1899).

*Mas ad.* Pileo toto, cervice summa et genis rufo-aeruginosis; collo reliquo et fascia plumosa media longitudinali gulæ albidis plus minusve fulvescente tinctis; fascia præpectoralis transversa cinerea; pectore et abdomine medio albis; lateribus tibiarumque plumis nigris; crisso et axillaribus nigris, viridi metallice nitentibus; dorso et scapularibus griseis, his, præcipue longioribus, paullum nitore viridi indutis; tectricibus alarum pallide griseis; remigibus, reetricibus, ac subalaribus nigris, nitore viridi indutis; rostro, frontis lateribus verrucosis, regione periophthalmica et cute nuda gulæ nigris; iride brunnea; pedibus rubris (*Taczanowski*) vel rubro-flavidis (*Festa*). Long. tot. circa 700 mm.; al. 420; caud. 210; rostri culm. 120; tarsi 70.

*Fæm.* Mari similis.

*Juv.* Capite et collo albido-fulvescentibus, crebre fusco striolatis; fascia præpectoralis cinerea; pectore et abdomine medio albis, plumis in medio stria cinerea



notatis; dorso et scapularibus fusco-cinereis, plumis pallidius marginatis et fascia subapicali fusca notatis; tectricibus alarum minoribus cinereis, albo marginatis; tectricibus mediis et majoribus cinereo-albidis; lateribus fusco-nigris; remigibus, cum subalaribus et axillaribus, cauda ac crisso nigris, nitore viridi indutis: "rostro nigricante; pedibus sordide virescentibus" (*Festa*).

*Hab.* Peruvia alta, La Puna (*Tschudi*), Pitumarca (prope Tinta) (*Whitely*), Junin, Lima, Huanta, Maraynioc (*Jelski*), Maraynioc, Pariayacu (*Kalinowski*): Æquatoria alta, Vallejicoso (Cotopaxi) (*Festa*).

This species resembles *T. melanopsis* in having the wing-coverts grey and a transverse grey band on the breast, but is easily distinguished by the breast and abdomen being white.

I have examined eight specimens of this species: one of them was collected by Kalinowski at Maraynioc, Pariayacu; this is labelled as the *type* and has been lent to me by Graf von Berlepsch, to whom it belongs; the other seven were collected by Dr. Festa in Ecuador.

The first (Plate IX.) is remarkable for the rusty-fulvous colour of the pileum and cheeks; the same colour, somewhat paler, spreads over the neck.

The specimens collected by Dr. Festa in Ecuador are four males, one female, and two young birds not sexed. The four males and the female show very slight differences; none of them have the head and neck of a rusty-fulvous colour so bright as in the type-specimen from Peru. Two, apparently fully adult, have the upper parts almost uniform grey, slightly paler on the wing-coverts. One, evidently the youngest, has the head and neck almost entirely white, with some fulvous feathers on the nape and lower part of fore neck; besides it has the smaller wing-coverts with whitish edgings and subapical bands or spots dusky grey, sure signs of being immature.

Lastly, the two young birds (Plate X.) are very remarkable in having the head and neck dull white-fulvous, with dusky streaks along the shafts of the feathers; besides, they have the white feathers of the lower parts streaked with grey along the



J.G. Keulemans del et lith.

Mintern Bros. imp.

THERISTICUS BRANICKII, JR.

middle. This juvenile stage has been very well described by Taczanowski (Orn. du Pérou, iii. p. 418).

*Theristicus branickii* seems to be confined to the highlands of Peru and Ecuador: its area, so far as we know at present, extends from Pitumarea, near Tinta, on the south, to Vallevicioso in Ecuador on the north.

This species has been confounded with *T. melanopis* by Tschudi and Cabanis, by Selater and Salvin, and also later on by Taczanowski. By Graf von Berlepsch and Stolzmann it was recognized as perfectly distinct, and the specific characters were pointed out quite clearly. Notwithstanding this, Dr. Sharpe has again mixed it up with *T. melanopis*, under the impression that the differences of plumage relied on by Berlepsch and Stolzmann for the separation of *T. branickii* were only those of age or season. —

But the specific validity of this species, agreed to quite recently also by Dr. Finsch, cannot be denied any longer, and I hope that the figures drawn by Mr. Keulemans (Plates IX. and X.), taken from Dr. Festa's specimens (adult and young), will make *T. branickii* recognizable at a glance, and settle the question for the future.

XXX.—On the Birds of St. Lucia Lake in Zululand.

By R. B. and J. D. S. WOODWARD\*.

HAVING just returned from an interesting trip to St. Lucia Lake, Zululand, we send you a short account of the birds met with. On September 19th, 1899, we left the Lower Tugela, the northern terminus of the Natal Railway, and, crossing the river, proceeded with our cart and oxen along the coast-road. We forded in succession the rivers Amatikulu, Umsundusi, Umhlatusi, and Umfolosi, and on the eighth day reached an extensive wood called the "Duku-duku" or "Wandering Bush," which stretches from the Umfolosi along the coast. This country is undulating, and the forest

\* For former articles on this subject by Messrs. Woodward see 'Ibis,' 1897, p. 400 and p. 495, and 1898, p. 216.